

REPORT OF THE UTILITIES DEPARTMENT
of
THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 97-003-E
CAROLINA POWER & LIGHT COMPANY

REPORT OF UTILITIES DEPARTMENT
SOUTH CAROLINA PUBLIC SERVICE COMMISSION
DOCKET NO. 97-003-E
CAROLINA POWER & LIGHT COMPANY

INDEX OF FUEL REPORT

| | |
|--|-------|
| Report of Fuel Adjustment Analysis----- | 1-6 |
| Exhibit 1 Power Plant Performance Data Report----- | 7 |
| Exhibit 2A Nuclear Unit Outage Report----- | 8-11 |
| Exhibit 2B Base Load Fossil Unit Outage Report----- | 12-14 |
| Exhibit 3 Generation Mix----- | 15 |
| Exhibit 4 Generation Statistics of Major Plants--- | 16 |
| Exhibit 5 Retail Comparison of MWH Sales----- | 17 |
| Exhibit 6 Retail Comparison of Fuel Costs----- | 18 |
| Exhibit 7 Retail Comparison of Fuel Costs (Graph)- | 19 |
| Exhibit 8 Adjustment for Fuel Costs Tariff----- | 20 |
| Exhibit 9 History of Cumulative Recovery Account-- | 21 |
| Exhibit 10 Projections of Cumulative Recovery Account Balance at various fuel factors for period ending March 1998.----- | 22 |

REPORT OF UTILITIES DEPARTMENT
SOUTH CAROLINA PUBLIC SERVICE COMMISSION
DOCKET NO. 97-003-E
CAROLINA POWER & LIGHT COMPANY
REPORT OF FUEL ADJUSTMENT ANALYSIS

Scope of Examination

The Commission's Utilities Department Staff analyzed the Company's procedures and practices pertaining to its fuel operation. Staff's examination consisted of the following:

- 1) Review of the Company's monthly fuel reports including:
 - a) Power Plant Performance Data Reports
 - b) Major Unit Outage Reports
 - c) Generation Mix
 - d) Generation Statistics
 - e) Retail Comparison of MWH Sales
 - f) Retail Comparison of Fuel Costs
- 2) On-site inspection of the Company's coal quality sampling technique.
- 3) Review of the Company's currently approved Adjustment for Fuel Costs Rider.
- 4) History of Cumulative Recovery Account
- 5) Calculation of fuel costs to be included in the base rates April 1997 through March 1998.

REVIEW OF COMPANY'S MONTHLY FUEL REPORTS

The Company files with this Commission monthly reports that include power plant performance data, major unit outages, generation mix, and other reports that provide the Staff pertinent data on which to evaluate the Company's fuel operating expenses.

Selected information from the Power Plant Performance Data Reports for nuclear and fossil plants is shown on Exhibit No. 1. It includes a listing of capacity factors and equivalent availability factors for each unit by month for the period and also includes the yearly capacity factors (1994-1996) and the lifetime (cumulative) capacity factors. These factors are expressed as a percentage. This percentage figure can be a useful index when attempting to locate or identify a particular problem or unusual occurrence.

Pursuant to S.C. Code Ann. Section 58-27-865 (Supp. 1996) certain criteria are established for review of a utility's effort to minimize fuel expenses. In evaluating a utility's fuel costs under this section, it is necessary to examine and determine whether the utility has made every reasonable effort to minimize fuel costs associated with the operation of its nuclear generation system while "giving due regard to reliability of service, economical generation mix, generating experience of comparable facilities and minimization of the total cost of providing service." Staff also examined records to determine if the utility achieved an adjusted capacity factor for the period under review of 92.5% as required by the statute to presume cost minimization.

HISTORY OF THE CUMULATIVE RECOVERY ACCOUNT

Exhibit No. 9 is a history of the cumulative recovery account balances from inception in 1979 to December 1996.

CALCULATION OF BASE RATE FUEL COST COMPONENT FOR APRIL 1997 THROUGH MARCH 1998.

Utilizing the currently projected sales and fuel cost figures for the period April 1997 through March 1998 and including the projected over-recovery balance of \$ \$186,139 in the cumulative recovery account through December 1996 (See Accounting Exhibit G), the average fuel expense is estimated to be 1.1215 cents per kilowatt-hour. Applying this fuel factor to the period would create an ending period estimated \$11,175 over-collection in the cumulative recovery account.

The Commission has consistently expressed its expectation that the Company exercise all reasonable prudence and efficiency in its fuel purchasing practices and aggressively control the operation and maintenance of its production facilities to assure the lowest fuel costs possible. Also, the Commission has directed the Staff to monitor the Company's plant operations and fuel purchasing to insure that any inefficient or negligent practice is brought to the Commission's attention.

Exhibit No. 10 is a table of Projections of the Cumulative Recovery Account for various fuel base levels for the twelve month period ending March 1998. Also indicated in the table are the projected results using the current fuel factor base component and the Company's proposed factor of 1.122 cents/KWH.

CAROLINA POWER & LIGHT COMPANY
POWER PLANT PERFORMANCE DATA (%) REPORT

| CAPACITY FACTOR | MW RATING | LIFE TIME | YEAR 1994 | YEAR 1995 | YEAR 1996 | JAN 1996 | FEB 1996 | MAR 1996 | APR 1996 | MAY 1996 | JUN 1996 | JUL 1996 | AUG 1996 | SEP 1996 | OCT 1996 | NOV 1996 | DEC 1996 |
|--------------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| BRUNSWICK 1 | 767 | 52.0 | 88.6 | 86.0 | 84.7 | 89.1 | 104.9 | 77.0 | 104.3 | 102.0 | 99.8 | 74.0 | 100.3 | 76.4 | 11.2 | 73.3 | 106.5 |
| BRUNSWICK 2 | 754 | 50.0 | 72.8 | 94.1 | 78.3 | 61.4 | 3.1 | 31.0 | 98.3 | 103.8 | 102.8 | 68.7 | 96.7 | 67.1 | 102.9 | 103.0 | 98.2 |
| HARRIS 1 | 860 | 78.9 | 80.4 | 78.9 | 93.6 | 98.8 | 101.5 | 73.4 | 91.2 | 94.1 | 99.8 | 99.5 | 99.5 | 76.3 | 96.0 | 102.3 | 90.8 |
| ROBINSON 2 | 683 | 64.1 | 77.7 | 86.1 | 91.0 | 105.5 | 106.3 | 105.6 | 105.6 | 103.9 | 102.0 | 101.6 | 100.3 | 21.4 | 26.0 | 106.9 | 107.3 |
| TOTAL NUCLEAR | 3064 | 57.7 | 80.0 | 86.1 | 87.0 | 88.6 | 79.2 | 71.0 | 99.4 | 100.6 | 101.0 | 86.0 | 99.2 | 61.8 | 60.9 | 96.2 | 100.2 |



| AVAILABILITY FACTOR | MW RATING | JAN 1996 | FEB 1996 | MAR 1996 | APR 1996 | MAY 1996 | JUN 1996 | JUL 1996 | AUG 1996 | SEP 1996 | OCT 1996 | NOV 1996 | DEC 1996 |
|------------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| MAYO 1 | 745 | 100.0 | 100.0 | 45.3 | 0.0 | 0.0 | 23.2 | 99.3 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| ROXBORO 2 | 670 | 90.9 | 100.0 | 96.6 | 81.2 | 82.0 | 100.0 | 92.0 | 90.7 | 41.1 | 0.0 | 0.0 | 0.0 |
| ROXBORO 3 | 707 | 100.0 | 100.0 | 100.0 | 100.0 | 97.2 | 100.0 | 100.0 | 100.0 | 89.0 | 100.0 | 73.6 | 51.9 |
| ROXBORO 4 | 700 | 99.5 | 92.6 | 100.0 | 100.0 | 77.5 | 55.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| BRUNSWICK 1 | 767 | 93.8 | 100.0 | 79.1 | 100.0 | 100.0 | 100.0 | 78.0 | 100.0 | 82.9 | 13.6 | 77.7 | 100.0 |
| BRUNSWICK 2 | 754 | 100.0 | 6.8 | 41.2 | 96.8 | 100.0 | 100.0 | 73.5 | 100.0 | 72.5 | 100.0 | 100.0 | 100.0 |
| HARRIS 1 | 860 | 98.5 | 100.0 | 75.1 | 92.9 | 97.2 | 100.0 | 100.0 | 100.0 | 79.4 | 100.0 | 100.0 | 91.4 |
| ROBINSON 2 | 683 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 23.2 | 34.8 | 100.0 | 100.0 |

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 1

CAROLINA POWER & LIGHT COMPANY
NUCLEAR UNIT OUTAGE REPORT

BRUNSWICK UNIT 1

| <u>NO.</u> | <u>DATE OFF</u> | <u>DATE ON</u> | <u>HOURS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|------------|-----------------|----------------|--------------------|---|
| 1. | 01/23/96 | 01/25/96 | 45.58/F | <p>During routine testing, a degrading trend in the time required to insert the control rods was observed. The control rod drives are required to insert control rods within a specific time. While initial testing showed control rod drive insertion was within specifications, the observed trend led to additional testing that confirmed the problem, and the unit was removed from service for repairs. Faulty scram pilot valves were rebuilt, control rod drive testing was satisfactorily completed, and the unit was returned to service.</p> |
| 2. | 03/18/96 | 03/24/96 | 155.43/F | <p>The unit was taken off-line to replace internal bolts in the plant's service water pumps. The bolts had become susceptible to cracking due to galvanic corrosion which resulted in the pumps being declared technically inoperable. The bolts were replaced on the safety-related service water pumps as well as the normal service water pumps. The unit was returned to service when work had been completed on enough pumps to ensure adequate service water supply.</p> |
| 3. | 07/11/96 | 07/17/96 | 163.29/F | <p>As required by the plant's operating license, the unit was taken off-line as Hurricane Bertha approached the plant site. Following the required outage, the plant was returned to service.</p> |
| 4. | 09/05/96 | 09/10/96 | 122.50/F | <p>As required by the plant's operating license, the unit was taken off-line as Hurricane Fran approached the plant site. Following the required outage, the plant was returned to service.</p> |

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2A
PAGE NO. 1 of 4

CAROLINA POWER & LIGHT COMPANY
NUCLEAR UNIT OUTAGE REPORT

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2A
PAGE NO. 2 of 4

| <u>NO.</u> | <u>DATE OFF</u> | <u>DATE ON</u> | <u>HOURS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|-------------------------|-----------------|----------------|--------------------|---|
| 5. | 10/05/96 | 11/07/96 | 804.48/S | The unit was removed from service for scheduled refueling, modifications, required testing and periodic, preventive, and corrective maintenance. Planned outage activities were completed, and the unit was returned to service. |
| BRUNSWICK UNIT 2 | | | | |
| 1. | 02/02/96 | 03/14/96 | 973.39/S | The unit was taken out of service for scheduled refueling, planned maintenance, turbine modifications and required testing. The outage was extended to repair steam leaks from the moisture reheater separator manways. Refueling, turbine modifications, planned maintenance, inspections, and testing were completed and the unit was returned to service. |
| 2. | 03/17/96 | 03/22/96 | 112.32/F | The unit was taken off-line to replace internal bolts in the plant's service water pumps. The bolts had become susceptible to cracking due to galvanic corrosion which resulted in the pumps being declared technically inoperable. The bolts were replaced on the safety related service water pumps as well as the normal service water pumps. The unit was returned to service when work had been completed on enough pumps to ensure adequate service water supply. |
| 3. | 04/27/96 | 04/28/96 | 23.17/F | The unit was taken off-line to repair a feedwater heater level control valve. The reactor remained critical to minimize the overall outage duration. Repairs were completed and the unit was returned to service. |
| 4. | 07/11/96 | 07/17/96 | 153.44/F | As required by the plant's operating license, the unit was taken off-line as Hurricane Bertha approached the plant site. Following the required outage, the plant was returned to service. |

CAROLINA POWER & LIGHT COMPANY
NUCLEAR UNIT OUTAGE REPORT

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2A
PAGE NO. 3 of 4

| <u>NO.</u> | <u>DATE OFF</u> | <u>DATE ON</u> | <u>HOURS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|----------------------|-----------------|----------------|--------------------|--|
| 5. | 07/26/96 | 07/28/96 | 43.28/F | The unit was taken off-line to repair a heater level control valve. The outage was deferred to a lower-load period over the weekend. Repairs were completed and the unit was returned to service. |
| 6. | 09/05/96 | 09/13/96 | 198.01/F | As required by the plant's operating license, the unit was taken off-line as Hurricane Fran approached the plant site. Following the required outage, the plant was returned to service. |
| HARRIS UNIT 1 | | | | |
| 1. | 12/27/95 | 01/01/96 | 129.30/S | The unit was removed from service to repair a feedwater heater which had exhibited reduced flow and to inspect a second feedwater heater as a precaution. Inspection determined that an impingement plate had broken loose from its mounting inside of the first heater and was causing the reduced flow. Inspection of the second heater also found a loose impingement plate. Weld repairs were made and the unit was returned to service. |
| 2. | 03/22/96 | 03/30/96 | 184.57/F | The unit was taken off-line to test the emergency power supply sequencers which had been declared inoperable. Sequencer testing was satisfactorily completed on March 23. The outage was extended to repair a broken valve stem on a main feedwater isolation valve and to repair condenser tube leaks. Outage activities were completed and the unit was returned to service. |
| 3. | 04/25/96 | 04/28/96 | 51.09/F | The unit tripped off-line when an "A" phase disconnect failed resulting in generator lockout. The failed breaker was replaced, and the unit was returned to service. |

CAROLINA POWER & LIGHT COMPANY
NUCLEAR UNIT OUTAGE REPORT

| <u>NO.</u> | <u>DATE OFF</u> | <u>DATE ON</u> | <u>HOURS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|------------|-----------------|----------------|--------------------|--|
| 4. | 05/03/96 | 05/04/96 | 21.12/F | The unit was separated from the grid by the failure of a main output breaker. Two breaker disconnects which had exhibited overheating were replaced and the unit was returned to service. |
| 5. | 09/03/96 | 09/10/96 | 148.00/F | The unit was forced off-line by failure of the "B" service water pump. Restart was delayed by the approach of Hurricane Fran and subsequent storm damage to the plant's emergency sirens. Approximately 68 hours of the outage duration resulted from Hurricane Fran. Service water pump repairs were made and restoration of an adequate number of emergency sirens was completed for plant restart. The unit was then returned to service. |
| 6. | 12/19/96 | 12/22/96 | 63.52/F | The unit experienced a turbine steam leak and was taken off line for weld repairs to the turbine piping. Weld repairs were completed and the unit was returned to service. |

ROBINSON UNIT 2

| | | | | |
|----|----------|----------|------------|--|
| 1. | 09/07/96 | 10/20/96 | 1,021.23/S | The unit was removed from service for scheduled refueling, modifications, required testing and periodic, preventative and corrective maintenance. Outage activities were completed and the unit was returned to service. |
| 2. | 10/20/96 | 10/21/97 | 16.10/F | During power ascension following the refueling outage, the "B" feedwater regulator valve failed in the open position resulting in a high steam generator water level and a reactor trip. Repairs were made to the failed valve and the unit was returned to service. |
| 3. | 10/21/96 | 10/21/96 | 1.00/S | The unit was removed from service for scheduled turbine overspeed trip test. Testing was completed satisfactorily and the unit was returned to service. |

* F-Forward C-Scheduled

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2A
PAGE NO. 4 of 4

CAROLINA POWER & LIGHT COMPANY
 FOSSIL UNIT OUTAGE REPORT
 (100 HRS OR GREATER DURATION)
 January 1, 1996 - December 31, 1996

| <u>MONTH</u> | <u>NAME</u> | <u>HRS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|--------------|-------------|------------------|--|
| Jan 96 | None | | |
| Feb 96 | None | | |
| Mar 96 | Mayo 1 | 2,423.15/S | The unit was removed from service for a scheduled turbine overhaul, boiler inspection, planned maintenance and required testing. The series of brief off-line periods after the unit was initially synchronized was required for turbine balance adjustments and combustion/steam flow control fine tuning. A major turbine overhaul including turbine control upgrade was completed. Additionally, extensive generator inspections, boiler chemical cleaning, economizer maintenance and fuel handling equipment overhaul as well as other preventive corrective and periodic maintenance, inspections and tests were performed. Outage activities were completed and the unit was returned to service. |
| Apr 96 | Mayo 1 | | Outage is continued from March. See above description. |
| | Roxboro 2 | 106.18/S | During a period of low demand, the unit was taken out of service to make weld repairs to a superheater inlet header drain line and for chemical cleaning of the turbine. Planned maintenance activities were completed. |

| <u>MONTH</u> | <u>NAME</u> | <u>HRS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|--------------|-------------|------------------|---|
| May 96 | Mayo 1 | | Outage is continued from March. See above description. |
| | Roxboro 2 | | Outage is continued from April. See above description. |
| | Roxboro 4 | 491.32/S | The unit was taken out of service for a scheduled boiler overhaul, turbine inspection and maintenance, other planned maintenance and required testing. A brief off-line period was required after the unit was initially synchronized in order to make turbine balance adjustments. The boiler overhaul was completed as planned. Other outage activities included maintenance work on the air preheaters, feedwater heaters and coal burners as well as miscellaneous preventive and corrective maintenance and required testing. Following completion of outage activities, the unit was returned to service. |
| Jun 96 | Mayo 1 | | Outage is continued from March. See above description. |
| | Roxboro 4 | | Outage is continued from May. See description on Page One. |
| Jul 96 | None | | |
| Aug 96 | None | | |
| Sep 96 | Roxboro 2 | 2633.06/S | The unit was taken out of service for the annual boiler inspection, a major turbine overhaul, modifications, required testing and periodic, preventative and corrective maintenance. |

| <u>MONTH</u> | <u>NAME</u> | <u>HRS/TYPE*</u> | <u>REASON FOR OUTAGE AND CORRECTIVE ACTION</u> |
|--------------|-------------|------------------|--|
| Oct 96 | Roxboro 2 | | Outage is continued from September. See above description. |
| Nov 96 | Roxboro 2 | | Outage is continued from September. See above description. |
| | Roxboro 3 | 548.18/S | The unit was taken out of service for an annual boiler inspection and boiler overhaul, modifications, required testing and periodic, preventative and corrective maintenance. Annual boiler overhaul and inspection was completed. Plant modifications were installed. Periodic and preventive maintenance was performed. Required testing was completed and the unit was returned to service. |
| Dec 96 | Roxboro 2 | | Outage in continued from September. See above description. |
| | Roxboro 3 | | Outage is continued from November. See above description. |
| <u>Type*</u> | S-scheduled | F-forced | |

CAROLINA POWER & LIGHT COMPANY

GENERATION MIX

JANUARY 1, 1996 - DECEMBER 31, 1996

| MONTH | FOSSIL (MWH) | % | NUCLEAR (MWH) | % | HYDRO (MWH) | % | TOTAL (MWH) |
|-----------|-----------------|-------|------------------|-------|----------------|------|----------------|
| JANUARY | 2,383,062 | 56.12 | 1,762,005 | 41.49 | 101,290 | 2.39 | 4,246,357 |
| FEBRUARY | 2,299,701 | 58.95 | 1,485,430 | 38.08 | 115,964 | 2.97 | 3,901,095 |
| MARCH | 2,474,195 | 61.85 | 1,431,105 | 35.78 | 95,006 | 2.37 | 4,000,306 |
| APRIL | 1,340,485 | 40.47 | 1,896,002 | 57.25 | 75,584 | 2.28 | 3,312,071 |
| MAY | 1,563,702 | 43.20 | 1,983,281 | 54.79 | 72,957 | 2.01 | 3,619,940 |
| JUNE | 1,994,980 | 50.09 | 1,925,557 | 48.34 | 62,411 | 1.57 | 3,982,948 |
| JULY | 2,575,972 | 59.65 | 1,709,474 | 39.59 | 32,883 | 0.76 | 4,318,329 |
| AUGUST | 2,366,372 | 54.08 | 1,953,355 | 44.64 | 56,126 | 1.28 | 4,375,853 |
| SEPTEMBER | 2,083,624 | 63.38 | 1,143,282 | 34.78 | 60,639 | 1.84 | 3,287,545 |
| OCTOBER | 2,125,591 | 63.40 | 1,172,678 | 34.97 | 54,558 | 1.63 | 3,352,827 |
| NOVEMBER | 1,974,388 | 50.98 | 1,843,625 | 47.60 | 54,874 | 1.42 | 3,872,887 |
| DECEMBER | 1,745,104 | 45.65 | 1,978,176 | 51.74 | 99,789 | 2.61 | 3,823,069 |
| TOTAL | 24,927,176 | 54.08 | 20,283,970 | 44.01 | 882,081 | 1.91 | 46,093,227 |

CAROLINA POWER & LIGHT COMPANY
 GENERATION STATISTICS OF CP&L PLANTS
 JANUARY 1, 1996 - DECEMBER 31, 1996

=====

| PLANT | TYPE FUEL | AVERAGE FUEL COST (CENTS/KWH*) | GENERATION (MWH) |
|--------------|-----------|-----------------------------------|---------------------|
| Harris | Nuclear | 0.43 | 5,924,887 |
| Robinson 2 | Nuclear | 0.46 | 5,460,101 |
| Brunswick 1 | Nuclear | 0.51 | 4,661,848 |
| Brunswick 2 | Nuclear | 0.52 | 4,237,136 |
| Robinson 1 | Coal | 1.41 | 944,349 |
| Weatherspoon | Coal | 1.80 | 482,020 |
| Asheville | Coal | 1.25 | 2,682,109 |
| Roxboro | Coal | 1.78 | 12,595,757 |
| Sutton | Coal | 1.61 | 2,364,556 |
| Cape Fear | Coal | 1.67 | 1,809,297 |
| Mayo | Coal | 2.10 | 2,684,125 |
| Lee | Coal | 1.82 | 1,306,917 |

(*) The average fuel costs for coal-fired plants include oil cost for start-up and flame stabilization.

CAROLINA POWER & LIGHT COMPANY
SOUTH CAROLINA RETAIL COMPARISON
OF ESTIMATED TO ACTUAL ENERGY SALES

1996

| | JAN | FEB | MARCH | APRIL | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC | TOTAL |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| [1] ESTIMATED SALES [MWH] | 578,805 | 552,304 | 511,560 | 462,662 | 484,279 | 544,328 | 619,245 | 607,949 | 699,189 | 529,471 | 533,994 | 562,940 | 6,686,726 |
| [2] ACTUAL SALES [MWH] | 595,227 | 585,007 | 502,581 | 513,315 | 519,762 | 582,940 | 613,288 | 650,683 | 591,575 | 522,962 | 513,771 | 555,788 | 6,746,899 |
| [3] AMOUNT DIFFERENCE [1]-[2] | -16,422 | -32,703 | 8,979 | -50,653 | -35,483 | -38,612 | 5,957 | -42,734 | 107,614 | 6,509 | 20,223 | 7,152 | -60,173 |
| [4] PERCENT DIFFERENCE [3]/[2] | -2.76% | -5.59% | 1.79% | -9.87% | -6.83% | -6.62% | .97% | -6.57% | 18.19% | 1.25% | 3.94% | 1.29% | -.89% |

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 5

CAROLINA POWER & LIGHT COMPANY
SOUTH CAROLINA RETAIL COMPARISON
OF ESTIMATED TO ACTUAL FUEL COSTS

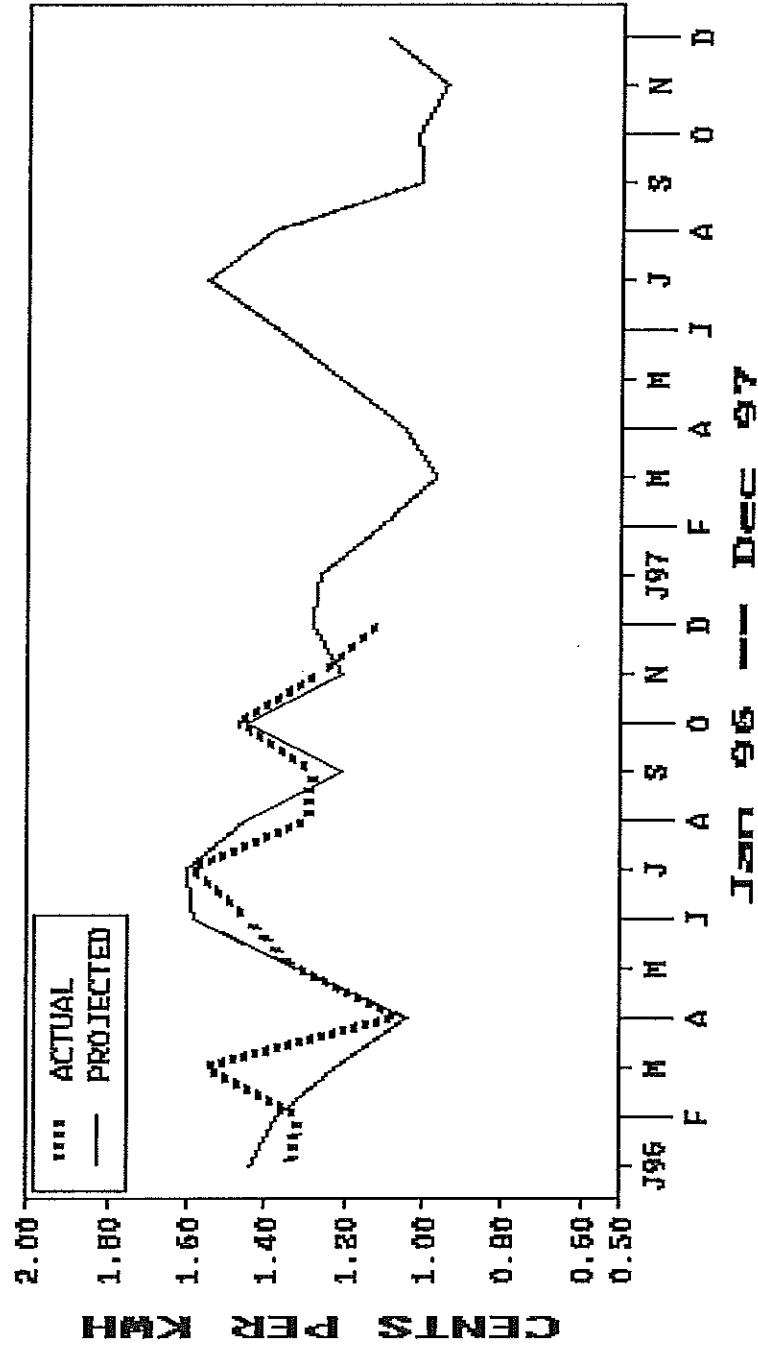
1996

| | JAN | FEB | MARCH | APRIL | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC |
|---------------------------------------|-------|-------|--------|--------|-------|-------|-------|--------|--------|--------|--------|-------|
| [1] ORIGINAL PROJECTION | 1.440 | 1.375 | 1.223 | 1.043 | 1.322 | 1.585 | 1.606 | 1.454 | 1.207 | 1.448 | 1.210 | 1.286 |
| [2] ACTUAL EXPERIENCE | 1.336 | 1.318 | 1.556 | 1.064 | 1.329 | 1.449 | 1.590 | 1.294 | 1.286 | 1.475 | 1.264 | 1.115 |
| [3] AMOUNT IN BASE | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 | 1.340 |
| [4] VARIANCE FROM ACTUAL [1-2]/[2] | 7.78% | 4.32% | -21.4% | -1.97% | -.53% | 9.39% | 1.01% | 12.36% | -6.14% | -1.83% | -4.27% | 15.34 |

DOCKET NO. 97-003-E
UTILITIES DEPARTMENT
EXHIBIT NO. 6

CAROLINA POWER & LIGHT COMPANY

Projected To Actual Fuel Costs



Carolina Power & Light Company
(South Carolina Only)

RIDER NO. 39P

ADJUSTMENT FOR FUEL COSTS

APPLICABILITY

This adjustment is applicable to and is a part of the Utility's South Carolina retail electric rate schedules.

The Public Service Commission has determined that the costs of fuel in an amount to the nearest one-thousandth of a cent, as determined by the following formula, will be included in the base rates to the extent determined reasonable and proper by the Commission:

$$F = \frac{E}{S} + \frac{G}{S_1}$$

Where:

F = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one-thousandth of a cent.

E = Total projected system fuel costs:

- (A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees. The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.

Plus

- (B) Purchased power fuel costs such as those incurred in unit power and Limited Term power purchases where the fuel costs associated with energy purchased are identifiable and are identified in the billing statement.

Plus

- (C) Interchange power fuel costs such as Short Term, Economy, and other where the energy is purchased on economic dispatch basis.

Energy receipts that do not involve money payments such as Diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.

Minus

- (D) The cost of fuel recovered through intersystem sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.

Energy deliveries that do not involve billing transactions such as Diversity energy and payback of storage are not defined as sales relative to this fuel calculation.

S = Projected system kilowatt-hour sales excluding any intersystem sales.

G = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in E. and S.

S₁ = Projected jurisdictional kilowatt-hour sales for the period covered by the fuel costs included in E.

The appropriate revenue related tax factor is to be included in these calculations.

The fuel cost (F) as determined by Public Service Commission of South Carolina is 1.340 cents per kilowatt-hour, which shall remain in effect until superseded by a subsequent Commission order.

Supersedes Rider No. 39N

Effective for bills rendered on and after April 1, 1995

CAROLINA POWER & LIGHT COMPANY
HISTORY OF CUMULATIVE RECOVERY ACCOUNT

| <u>PERIOD ENDING</u> | <u>OVER (UNDER)\$</u> |
|--|-----------------------|
| March 1979 - Automatic Fuel Adjustment in Effect | |
| December 1979 | 1,104,730 |
| September 1980 | (12,000,131) |
| March 1981 | (4,060,364) |
| August 1981 | (12,113,832) |
| March 1982 | (935,412) |
| September 1982 | (6,881,796) |
| March 1983 | (2,259,114) |
| September 1983 | (3,264,694) |
| March 1984 | 109,270 |
| September 1984 | 2,172,859 |
| March 1985 | (2,317,008) |
| September 1985 | 745,913 |
| March 1986 | 1,972,280 |
| September 1986 | (696,805) |
| March 1987 | 2,408,354 |
| September 1987 | 3,310,059 |
| March 1988 | (3,964,888) |
| September 1988 | (5,737,541) |
| March 1989 | (8,125,496) |
| September 1989 | (5,875,641) |
| March 1990 | (9,311,149) |
| September 1990 | (658,614) |
| March 1991 | 1,403,023 |
| September 1991 | 4,661,988 |
| March 1992 | 5,201,112 |
| September 1992 | (6,712,920) |
| March 1993 | (9,563,180) |
| September 1993 | 0 * |
| March 1994 | (1,010,684) |
| September 1994 | 1,975,939 |
| March 1995 | 7,408,161 |
| September 1995 | 2,011,489 |
| December 1996 | 186,139 |

* Eliminated (\$14,011,263), Per Order No. 93-865.

CAROLINA POWER & LIGHT COMPANY

PROJECTIONS OF THE CUMULATIVE RECOVERY ACCOUNT
 FOR THE TWELVE MONTH PERIOD ENDING
 MARCH 1998

| | FUEL BASE | PROJECTED CUMULATIVE OVER\ (UNDER) RECOVERY [\$] |
|------------------|--------------|---|
| ===== | | |
| | 1.1150 | (450,803) |
| ZERO UNDER | 1.1214 | (28,755) |
| ZERO OVER | 1.1215 | 11,175 |
| COMPANY PROPOSED | 1.1220 | 41,586 |
| | 1.1400 | 1,307,728 |
| | 1.1650 | 3,066,258 |
| | 1.1900 | 4,824,789 |
| | 1.2150 | 6,583,319 |
| | 1.2400 | 8,341,850 |
| | 1.2650 | 10,100,380 |
| | 1.2900 | 11,858,911 |
| | 1.3150 | 13,617,441 |
| CURRENT FACTOR | 1.3400 | 15,375,972 |
| | 1.3650 | 17,134,502 |
| | 1.3900 | 18,893,032 |
| | 1.4150 | 20,651,563 |
| | 1.4400 | 22,410,093 |
| | 1.4650 | 24,168,624 |